

AMENDMENTS TO THE ABSTRACT

Please delete the section entitled "ABSTRACT OF THE DISCLOSURE" in its entirety and substitute the following section therefor:

ABSTRACT OF THE DISCLOSURE

An apparatus for performing cryptographic operations. The apparatus includes an x86-compatible microprocessor that has fetch logic, algorithm logic, and execution logic. The fetch logic is configured to receive a single, atomic cryptographic instruction as one of the instructions in an application program executing on the x86-compatible microprocessor. The single, atomic cryptographic instruction prescribes ~~one of the cryptographic operations~~ an encryption operation and one of a plurality of cryptographic algorithms. The algorithm logic is operatively coupled to the single, atomic cryptographic instruction. The algorithm logic directs the x86-compatible microprocessor to execute the encryption operation ~~one of the cryptographic operations~~ according to the one of a plurality of cryptographic algorithms. The execution logic is operatively coupled to the algorithm logic. The execution logic executes the encryption operation ~~one of the cryptographic operations~~. The execution logic includes a cryptography unit for executing a plurality of cryptographic rounds required to complete the encryption operation ~~one of the cryptographic operations~~.